

**Medical Care Collection Fund (MCCF)
Electronic Data Interchange (EDI)
Transaction Applications Suite (TAS) Phase 2**

eInsurance IB*2.0*702

**Deployment, Installation, Back-out, and Rollback
Guide**



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**Department of Veterans Affairs
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Revision History

Date	Version	Description	Author
04/11/2022	1.3	Updating for IOC exit. Modified Sections 1.2, 3.3.3, and 5.2.2.	MCCF EDI TAS eInsurance
03/02/2022	1.2	Re-submitting for IOC Entry – Needed to update the software prior to IOC production testing. Added a fourth site to section 3.2.2. Added bullet 19 to section 5.2.2	MCCF EDI TAS eInsurance
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Artifact Rationale

This document describes the Deployment, Installation, Back-out, and Rollback Plan for new products going into the VA Enterprise. The plan includes information about system support, issue tracking, escalation processes, and roles and responsibilities involved in all those activities. Its purpose is to provide clients, stakeholders, and support personnel with a smooth transition to the new product or software, and should be structured appropriately, to reflect particulars of these procedures at a single or at multiple locations.

Per the Veteran-focused Integrated Process (VIP) Guide, the Deployment, Installation, Back-out, and Rollback Plan is required to be completed prior to Critical Decision Point #2 (CD #2), with the expectation that it will be updated throughout the lifecycle of the project for each build, as needed.

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1 Introduction

This document describes how to deploy and install the IB*2.0*702 patch, as well as how to back-out the product and rollback to a previous version or data set.

1.1 Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom the IB*2.0*702 will be deployed and installed, as well as how the patches are to be backed out and rolled back, if necessary. The plan also identifies resources, communications plan, and rollout schedule. Specific instructions for installation, back-out, and rollback are included in this document.

1.2 Dependencies

The following patches must be installed before IB*2.0*702:

- IB*2.0*665
- IB*2.0*687

1.3 Constraints

This patch is intended for a fully patched VistA system.

2 Roles and Responsibilities

Table 1: Deployment, Installation, Back-out, and Rollback Roles and Responsibilities

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
1	VA OIT, VA OIT Health Services Portfolio & PMO	Deployment	Plan and schedule deployment (including orchestration with vendors)	Planning
2	Local VAMC and CPAC processes	Deployment	Determine and document the roles and responsibilities of those involved in the deployment	Planning
3	Field Testing (Initial Operating Capability (IOC)), Health Services Portfolio Testing & VIP Release Agent Approval	Deployment	Test for operational readiness	Testing
4	Health Services Portfolio and Field Operations	Deployment	Execute deployment	Deployment
5	Individual Veterans Affairs Medical Centers (VAMCs)	Installation	Plan and schedule installation	Deployment

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
6	VIP Release Agent	Installation	Ensure authority to operate and that certificate authority security documentation is in place	Deployment
7	N/A for this patch as we are using only the existing VistA system	Installation	Validate through facility POC to ensure that IT equipment has been accepted using asset inventory processes	N/A
8	VA's eBusiness team	Installations	Coordinate training	Deployment
9	VIP Release Agent, Health Services Portfolio & the development team	Back-out	Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out)	Deployment
10	No changes to current process – we are using the existing VistA system	Post Deployment	Hardware, Software and System Support	Warranty

3 Deployment

The deployment is planned as a national rollout.

This section provides the schedule and milestones for the deployment.

3.1 Timeline

The deployment and installation is scheduled to run for 30 days, starting with national release.

3.2 Site Readiness Assessment

This section discusses the locations that will receive the IB*2.0*702 deployment.

3.2.1 Deployment Topology (Targeted Architecture)

This patch IB*2.0*702 is to be nationally released to all VAMCs.

3.2.2 Site Information (Locations, Deployment Recipients)

The test sites for IOC testing are:

- Heartland East VA Health Care System (Saint Louis, MO)
- Lexington-LD VAMC (Lexington, KY)

- Hines VA Health Care System (Hines, IL)
- Texas Valley Coastal Bend HCS (Harlingen, TX)

Upon national release all VAMCs are expected to install this patch within the compliance dates.

3.2.3 Site Preparation

The following table describes preparation required by the site prior to deployment.

Table 2: Site Preparation

Site / Other	Problem / Change Needed	Features to Adapt / Modify to New Product	Actions / Steps	Owner
N/A	N/A	N/A	N/A	N/A

3.3 Resources

3.3.1 Facility Specifics

The following table lists facility-specific features required for deployment.

Table 3: Facility-Specific Features

Site	Space / Room	Features Needed	Other
N/A	N/A	N/A	N/A

3.3.2 Hardware

The following table describes hardware specifications required at each site prior to deployment.

Table 4: Hardware Specifications

Required Hardware	Model	Version	Configuration	Manufacturer	Other
Existing VistA system	N/A	N/A	N/A	N/A	N/A

Please see the Roles and Responsibilities table in Section 2 for details about who is responsible for preparing the site to meet these hardware specifications.

3.3.3 Software

The following table describes software specifications required at each site prior to deployment.

Table 5: Software Specifications

Required Software	Make	Version	Configuration	Manufacturer	Other
Fully patched Integrated Billing package within VistA	N/A	2.0	N/A	N/A	N/A

Required Software	Make	Version	Configuration	Manufacturer	Other
IB*2.0*665	N/A	Nationally released version	N/A	N/A	N/A
IB*2.0*687	N/A	Nationally released version	N/A	N/A	N/A

Please see the Roles and Responsibilities table in Section 2 above for details about who is responsible for preparing the site to meet these software specifications.

3.3.4 Communications

The sites that are participating in field testing (IOC) will use the “Patch Tracking” message in Outlook to communicate with the eBusiness eInsurance sub-team, the developers, and product support personnel.

3.3.4.1 Deployment / Installation / Back-out Checklist

The Release Management team will deploy the patch IB*2.0*702, which is tracked in the National Patch Module (NPM) in Forum, nationally to all VAMCs. Forum automatically tracks the patches as they are installed in the different VAMC production systems. One can run a report in Forum to identify when and by whom the patch was installed in the VistA production at each site. A report can also be run to identify which sites have not currently installed the patch in their VistA production systems. Therefore, this information does not need to be manually tracked in the chart below.

Table 6: Deployment / Installation / Back-out Checklist

Activity	Day	Time	Individual who Completed Task
Deploy	N/A	N/A	N/A
Install	N/A	N/A	N/A
Back-out	N/A	N/A	N/A

4 Installation

4.1 Pre-installation and System Requirements

IB*2.0*702, a patch to the existing VistA Integrated Billing 2.0 package, is installable on a fully patched M(UMPS) VistA system and operates on top of the VistA environment provided by the VistA infrastructure packages. The latter provides utilities which communicate with the underlying operating system and hardware, providing Integrated Billing independence from variations in hardware and operating system.

4.2 Platform Installation and Preparation

Refer to the IB*2.0*702 documentation on the National Patch Module (NPM) on Forum for the detailed installation instructions. These instructions will include any pre installation steps if applicable.

4.3 Download and Extract Files

Refer to the IB*2.0*702 documentation on the NPM to find the location of related documentation that can be downloaded. IB*2.0*702 will be transmitted via a PackMan message and can be pulled from the NPM. It is not a host file, and therefore does not need to be downloaded separately.

4.4 Database Creation

This patch does NOT introduce a new database. It uses the existing VistA database.

4.5 Installation Scripts

No installation scripts are needed for IB*2.0*702 installation.

4.6 Cron Scripts

No Cron scripts are needed for IB*2.0*702 installation.

4.7 Access Requirements and Skills Needed for the Installation

The following staff need access to the PackMan message containing the IB*2.0*702 patch or Forum's NPM in order to download the nationally released IB*2.0*702 patch. The software is to be installed by the sites or regions designated: VA OI&T IT OPERATIONS SERVICE, Enterprise Service Lines, and / or VistA Applications Division¹.

4.8 Installation Procedure

Refer to the IB*2.0*702 documentation on the NPM for the detailed installation instructions.

4.9 Installation Verification Procedure

Refer to the IB*2.0*702 documentation on the NPM for detailed installation instructions. These instructions include any post installation steps if applicable.

4.10 System Configuration

No system configuration changes are required for this patch.

¹ "Enterprise service lines, VAD" for short. Formerly known as the IRM (Information Resources Management) or IT support.

4.11 Database Tuning

No reconfiguration of the VistA database, memory allocations, or other resources is necessary.

5 Back-out Procedure

Back-out pertains to a return to the last known valid instance of operational software and platform settings.

5.1 Back-out Strategy

Although it is unlikely, due to care in collecting, elaborating, and designing approved user stories, followed by multiple testing stages (Developer Unit Testing, Component Integration Testing, SQA Testing, and User Acceptance Testing), a back-out decision due to major issues with this patch could occur during site Mirror Testing, Site Production Testing or after National Release to the field (VAMCs). The best strategy is dependent on the stage during which the decision is made.

If during Mirror testing or Site Production Testing, a new version of a defect correcting test patch is produced, retested, and successfully passes development team testing, it would be resubmitted to the site for testing. If the patch produced catastrophic problems, a new version of the patch can be used to restore the build components to their pre-patch condition.

If the defect(s) were not discovered until after national release but during the designated support period, a new patch will be entered into the National Patch Module on Forum and go through all the necessary milestone reviews etc., as a patch for a patch. It is up to VA OIT and product support whether this new patch would be defined as an emergency patch or not. This new patch could be used to address specific issues pertaining to the original patch or could be used to restore the build components to their original pre-patch condition.

After the support period, the VistA Maintenance Program would produce the new patch, either to correct the defective components or to back-out the patch.

5.2 Back-out Considerations

It is necessary to determine if a wholesale back-out of the patch IB*2.0*702 is needed or if a better course of action is to correct through a new version of the patch (if prior to national release) or through a subsequent patch aimed at specific areas modified or affected by the original patch (after national release). A wholesale back-out of the patch will still require a new version (if prior to national release) or a subsequent patch (after national release). If the back-out is post-release of this patch IB*2.0*702, this patch should be assigned status of “Entered in Error” in Forum’s NPM.

5.2.1 Load Testing

N/A. The back-out process if necessary is executed at normal, rather than raised job priority, and is expected to have no significant effect on total system performance. Subsequent to the reversion, the performance demands on the system would be unchanged.

5.2.2 User Acceptance Testing

1. VistA has been modified to create a method for a real-time Electronic Insurance Coverage Discovery (EICD) inquiry to be generated by a user. A new protocol EICD Request [IBCNE EICD REQUEST] was added to the Request Electronic Insurance [IBCNE REQUEST INQUIRY] menu. A new security key was added, IBCNE EICD REQUEST.
2. VistA has been modified to prevent an Insurance Company group plan from being deleted if there are members still in the group, so that no subscribers are disassociated.
3. VistA has been modified to send additional statistics in the daily registration message from VistA to FSC including information related to Electronic Insurance Coverage Discovery (EICD).
4. VistA has been modified to display the entire Note/Comment segment for the following options:
 - a) Process Insurance Buffer [IBCN INSURANCE BUFFER PROCESS]
(expand entry benefits section)
 - b) Patient Insurance Info View/Edit [IBCN PATIENT INSURANCE]
(expand benefits section / view policy, expand benefits section)
 - c) View Patient Insurance [IBCN VIEW PATIENT INSURANCE]
(expand benefits section / view policy, expand benefits section)
 - d) eIV Response Report [IBCNE IIV RESPONSE REPORT]
 - e) Claims Tracking Edit [IBT EDIT BI TRACKING ENTRY]
 - f) Claims Tracking Edit [IBT EDIT HR TRACKING ENTRY]
 - g) Claims Tracking Edit [IBT EDIT IR TRACKING ENTRY]
 - h) Claims Tracking Edit [IBT EDIT TRACKING ENTRY]
5. VistA has been modified to allow auto-update when no group number is returned if there is only one active policy for the payer on file. To allow for this, a new field EIV NO GRP NUM A/U (#51.34) was added to the IB SITE PARAMETERS file (#350.9), with a default value of 180. A prompt was also added to MCCR Site Parameters [IBJ MCCR SITE PARAMETERS], allowing the user to view and modify the value for the new field.
6. VistA has been modified to display the patient relationship on the eIV Response Report [IBCNE IIV RESPONSE REPORT].
7. VistA has been modified to add "ICB,IB NOINS" to the NEW PERSON file (#200) as an APPLICATION PROXY. This user will be used to automatically process No Insurance buffer entries in ICB.
8. VistA has been modified to evaluate 3 fields when an insurance companies standard filing times change. If any of the filing time frame values are updated the user will be asked if they want all Active group plans for that insurance updated.
Input template IBEDIT INS CO1 was modified.
9. VistA has been modified to update the 'eIV Ambiguous Policy Report' [IBCNE IIV AMBIGUOUS POLICY RPT]. The report has been updated to reflect all ambiguous payer responses for a specific date range. The option description has been updated to reflect current usage.

The report was added to the following menus:

- a) Insurance Reports [IBCN INS RPTS]
 - b) eIV Menu [IBCNE IIV MENU]
10. VistA has been modified to update the 'eIV Inactive Policy Report' [IBCNE IIV INACTIVE POLICY]. The report has been updated to reflect inactive responses for a specific date range. The option description has been updated to reflect current usage.

The report was added to the following menus:

- a) Insurance Reports [IBCN INS RPTS]
 - b) eIV Menu [IBCNE IIV MENU]
11. VistA has been modified to remove the menu option for 'Potential New Insurance Found' [IBCNE POTENTIAL NEW INS FOUND] from the following menus:
- a) Insurance Reports [IBCN INS RPTS]
 - b) eIV Menu [IBCNE IIV MENU]
12. VistA has been modified to update the 'Insurance Buffer Activity' [IBCN OUTPUT INS BUFF ACTIVITY]. The report was updated to allow the reporting of the last day of the month when reporting by month. The option description has been updated to reflect current usage.
13. VistA has been modified to update the 'Insurance Buffer Employee' [IBCN OUTPUT INS BUFF EMPLOYEE]. To allow the reporting of the last day of the month when reporting by month. The report was also updated to capture the total number of entries accepted and rejected so that the count of accepted and rejected is always a line item, even when the count is zero .The option description has been updated to reflect current usage.
14. VistA has been modified to update the 'PATIENT INSURANCE MENU' [IBCN INSURANCE MGMT MENU]. The menu was updated to remove options that also reside on the 'Insurance Reports' [IBCN INS RPTS]sub option. The following no longer reside on the Patient Insurance menu :
- a) 'Generate Insurance Company Listings' [IBCN ID DUP INSURANCE ENTRIES]
 - b) 'List Inactive Ins. Co. Covering Patients'[IBCN LIST INACTIVE INS W/PAT]
 - c) 'List Plans by Insurance Company' [IBCN LIST PLANS BY INS CO]
 - d) 'Insurance Plans Missing Data Report' [IBCN INS PLANS MISSING DATA]
 - e) 'Verification of No Coverage Report' [IBCN NO COVERAGE VERIFIED]
 - f) 'Active Policies with no Effective Date Report' [IBCN POL W/NO EFF DATE REPORT]
 - g) 'List New not Verified Policies' [IBCN LIST NEW NOT VER]
 - h) 'Patients with or without Insurance Report' [IBCN PT W/VO INSURANCE REPORT]
15. VistA has been modified to correctly populate the PROCESSED BY field (#355.33,.06) with the 'AUTOUPDATE,IBEIV' user, when processing an eIV response which results in VistA auto-updating the patient's policy record AND the acceptance of a buffer entry.

16. VistA has been modified to include a new eInsurance report for coverage limitations. The new option is 'Coverage Limitations Report' [IBCN COVERAGE LIMITATION RPT] and will be added to menu 'Insurance Reports' [IBCN INS RPTS]. The report will display all coverage limitations for selected insurance company(s) and group plans.
17. VistA has been Modified to include two new fields in in the IIV RESPONSE file (#365). The field REQUESTED SERVICE DATE (#.14) enhance control of the date submitted to the Payer by the system as the date that the service was performed. The inclusion of field REQUESTED SERVICE TYPE CODE (#.15) when an eIV insurance inquiry is sent.
18. Updated the header that is displayed when a user selects the EB (Eligibility Benefit) action while viewing a patient's insurance policy. This was to correct a problem where the header periodically did not display the associated service date and/or service type even though the eligibility benefits from the payer's response was available.
19. VistA was modified to relax fatal errors recently added in IB*2.0*665 to the bill authorization process which prevented billers from sending claims that exceed HIPAA limits to warnings for the PC1 (Procedure Code), VC1 (Value Code) , DC1 (Diagnosis Code), CC1 (Condition Code), OC1 (Occurrence Code), OS1 (Occurrence Span Code) Segments.

5.3 Back-out Criteria

Back-out Criteria (any of the following):

- The project is canceled
- The requested changes implemented by IB*2.0*702 are no longer desired by VA OIT and the eBusiness eInsurance sub-team
- The patch produces catastrophic problems

5.4 Back-out Risks

Since the eInsurance software is tightly integrated with external systems, any attempt at a back-out should include close consultation with the external trading partners such as the Financial Services Center (FSC) and the Health Care Clearing House (HCCH) to determine risk.

5.5 Authority for Back-out

Any back-out decision should be a joint decision of the Business Owner (or their representative) and the Program Manager with input from the Health Services Portfolio (HSP) Application Coordinator, developers (both project and Tier 3 HSP), and if appropriate, external trading partners such as the VA Financial Service Center (FSC) or Health Care Clearing House.

eInsurance is tightly integrated with these external partners and a back-out of the patch should not be a standalone decision.

5.6 Back-out Procedure

The back-out plan for VistA applications is complex and not a “one size fits all” solution. The general strategy for a VistA back-out is to repair the code with a follow-up patch. The development team recommends that sites log a ticket if it is a nationally released patch.

Back-out Procedure prior to National Release. If it is prior to national release, the site will be already working directly with the development team daily and should contact that team. The development team members will have been identified in the Initial Operating Capability (IOC) Memorandum of Understanding (MOU). As discussed in section 5.2, it is likely that the development team can quickly address via a new software version. If the site is unsure who to contact, they may log a ticket to contact Health Services Portfolio - Management Systems Team.

The IB*2.0*702 patch contains the following build components.

- Data Dictionary
- Options
- Protocols
- Security Key
- Input Templates
- HL7 Application Parameters
- Routines

While the VistA installation procedure of the KIDS build allows the installer to back up the modified routines using the ‘Backup a Transport Global’ action, due to the complexity of this patch, it is not recommended for back-out, and a restore from a backup of the Transport Global should not be attempted. In the event that a site decides to back out this patch, the site should contact the Enterprise Service Desk (ESD) to submit a help desk ticket. The development team will need to issue a follow-on patch in order to comprehensively back-out this patch and / or to clean up corrupted data / remove data dictionary changes, if needed and restore the system to a functioning state.

Please contact the EPMD team for assistance since this installed patch contains components in addition to routines.

5.7 Back-out Verification Procedure

Successful back-out is confirmed by verification that the back-out patch was successfully implemented. This includes successful installation and testing that the back-out acted as expected, as defined together with the team the site contacted in section 5.5.

6 Rollback Procedure

Rollback pertains to data. The only data changes in this patch are specific to the operational software and platform settings and they are covered in the Back-out procedures detailed elsewhere in this document.

6.1 Rollback Considerations

Not applicable.

6.2 Rollback Criteria

Not applicable.

6.3 Rollback Risks

Not applicable.

6.4 Authority for Rollback

Not applicable.

6.5 Rollback Procedure

Not applicable.

6.6 Rollback Verification Procedure

Not applicable.